

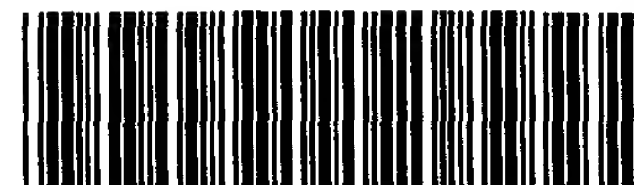
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Page 1 of 9

MAY 16 2002

#11 1638

TECH CENTER 1600/2900



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1600

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/722,377

DATE: 05/09/2002

TIME: 14:19:20

Input Set : A:\620\_58.app

Output Set: N:\CRF3\05092002\I722377.raw

4 <110> APPLICANT: Schulze-Lefert, Paul MJ  
5 Panstruga, Ralph  
6 Buschges, Rainer  
8 <120> TITLE OF INVENTION: Polynucleotide and its use for modulating a defence  
9 response in plants  
11 <130> FILE REFERENCE: 620-58  
C--> 13 <140> CURRENT APPLICATION NUMBER: US/09/722,377  
C--> 14 <141> CURRENT FILING DATE: 2000-11-28  
16 <150> PRIOR APPLICATION NUMBER: PCT/GB97/02046  
17 <151> PRIOR FILING DATE: 1997-07-29  
19 <150> PRIOR APPLICATION NUMBER: GB 9615879.5  
20 <151> PRIOR FILING DATE: 1996-07-29  
22 <150> PRIOR APPLICATION NUMBER: GB 9622626.1  
23 <151> PRIOR FILING DATE: 1996-10-30  
25 <150> PRIOR APPLICATION NUMBER: GB 9704789.8  
26 <151> PRIOR FILING DATE: 1997-03-07  
28 <160> NUMBER OF SEQ ID NOS: 79  
30 <170> SOFTWARE: PatentIn Ver. 2.1  
32 <210> SEQ ID NO: 1  
33 <211> LENGTH: 533  
34 <212> TYPE: PRT  
35 <213> ORGANISM: Hordeum vulgare  
37 <400> SEQUENCE: 1  
38 Met Ser Asp Lys Lys Gly Val Pro Ala Arg Glu Leu Pro Glu Thr Pro  
39 1 5 10 15  
41 Ser Trp Ala Val Ala Val Val Phe Ala Ala Met Val Leu Val Ser Val  
42 20 25 30  
44 Leu Met Glu His Gly Leu His Lys Leu Gly His Trp Phe Gln His Arg  
45 35 40 45  
47 His Lys Lys Ala Leu Trp Glu Ala Leu Glu Lys Met Lys Ala Glu Leu  
48 50 55 60  
50 Met Leu Val Gly Phe Ile Ser Leu Leu Leu Ile Val Thr Gln Asp Pro  
51 65 70 75 80  
53 Ile Ile Ala Lys Ile Cys Ile Ser Glu Asp Ala Ala Asp Val Met Trp  
54 85 90 95  
56 Pro Cys Lys Arg Gly Thr Glu Gly Arg Lys Pro Ser Lys Tyr Val Asp  
57 100 105 110  
59 Tyr Cys Pro Glu Gly Lys Val Ala Leu Met Ser Thr Gly Ser Leu His  
60 115 120 125  
62 Gln Leu His Val Phe Ile Phe Val Leu Ala Val Phe His Val Thr Tyr  
63 130 135 140  
65 Ser Val Ile Thr Ile Ala Leu Ser Arg Leu Lys Met Arg Thr Trp Lys  
66 145 150 155 160

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68 Lys Trp Glu Thr Glu Thr Thr Ser Leu Glu Tyr Gln Phe Ala Asn Asp
69                               165                               170                               175
71 Pro Ala Arg Phe Arg Phe Thr His Gln Thr Ser Phe Val Lys Arg His
72                               180                               185                               190
74 Leu Gly Leu Ser Ser Thr Pro Gly Ile Arg Trp Val Val Ala Phe Phe
75                               195                               200                               205
77 Arg Gln Phe Phe Arg Ser Val Thr Lys Val Asp Tyr Leu Thr Leu Arg
78                               210                               215                               220
80 Ala Gly Phe Ile Asn Ala His Leu Ser Gln Asn Ser Lys Phe Asp Phe
81 225                               230                               235                               240
83 His Lys Tyr Ile Lys Arg Ser Met Glu Asp Asp Phe Lys Val Val Val
84                               245                               250                               255
86 Gly Ile Ser Leu Pro Leu Trp Gly Val Ala Ile Leu Thr Leu Phe Leu
87                               260                               265                               270
89 Asp Ile Asn Gly Val Gly Thr Leu Ile Trp Ile Ser Phe Ile Pro Leu
90                               275                               280                               285
92 Val Ile Leu Leu Cys Val Gly Thr Lys Leu Glu Met Ile Ile Met Glu
93                               290                               295                               300
95 Met Ala Leu Glu Ile Gln Asp Arg Ala Ser Val Ile Lys Gly Ala Pro
96 305                               310                               315                               320
98 Val Val Glu Pro Ser Asn Lys Phe Phe Trp Phe His Arg Pro Asp Trp
99                               325                               330                               335
101 Val Leu Phe Phe Ile His Leu Thr Leu Phe Gln Asn Ala Phe Gln Met
102                               340                               345                               350
104 Ala His Phe Val Trp Thr Val Ala Thr Pro Gly Leu Lys Lys Cys Tyr
105                               355                               360                               365
107 His Thr Gln Ile Gly Leu Ser Ile Met Lys Val Val Val Gly Leu Ala
108                               370                               375                               380
110 Leu Gln Phe Leu Cys Ser Tyr Met Thr Phe Pro Leu Tyr Ala Leu Val
111 385                               390                               395                               400
113 Thr Gln Met Gly Ser Asn Met Lys Arg Ser Ile Phe Asp Glu Gln Thr
114                               405                               410                               415
116 Ser Lys Ala Leu Thr Asn Trp Arg Asn Thr Ala Lys Glu Lys Lys Lys
117                               420                               425                               430
119 Val Arg Asp Thr Asp Met Leu Met Ala Gln Met Ile Gly Asp Ala Thr
120                               435                               440                               445
122 Pro Ser Arg Gly Ser Ser Pro Met Pro Ser Arg Gly Ser Ser Pro Val
123                               450                               455                               460
125 His Leu Leu His Lys Gly Met Gly Arg Ser Asp Asp Pro Gln Ser Ala
126 465                               470                               475                               480
128 Pro Thr Ser Pro Arg Thr Gln Gln Glu Ala Arg Asp Met Tyr Pro Val
129                               485                               490                               495
131 Val Val Ala His Pro Val His Arg Leu Asn Pro Asn Asp Arg Arg Arg
132                               500                               505                               510
134 Ser Ala Ser Ser Ser Ala Leu Glu Ala Asp Ile Pro Ser Ala Asp Phe
135                               515                               520                               525
137 Ser Phe Ser Gln Gly
138                               530
142 <210> SEQ ID NO: 2

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## RAW SEQUENCE LISTING

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Input Set : A:\620\_58.app

Output Set: N:\CRF3\05092002\I722377.raw

143 &lt;211&gt; LENGTH: 1602

144 &lt;212&gt; TYPE: DNA

145 &lt;213&gt; ORGANISM: Hordeum vulgare

147 &lt;400&gt; SEQUENCE: 2

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148 atgtcggaca aaaaaggggt gccggcgcgg gagctgccgg agacgccgtc gtgggcggtg 60
149 gcggtggtct tcgccgccat ggtgctcgtg tccgtcctca tggaacacgg cctccacaag 120
150 ctcggccatt ggttccagca ccggcacaag aaggccctgt gggaggcgct ggagaagatg 180
151 aaggcgagc tcattgctgtt gggcttcata tccctgctcc tcattgctac gcaggacccc 240
152 atcatcgcca agatatgcat ctccgaggat gccgcgcgac tcattgtggc ctgcaagcgc 300
153 ggcaccgagg gccgcaagcc cagcaagtac gttgactact gcccgagggg caaggtggcg 360
154 ctcatgtcca cgggcagctt gcaccagctg cacgtcttca tcttcgtgct cgcggtcttc 420
155 catgtcacct acagcgtcat caccatagct ctaagccgtc tcaaatgag aacatggaag 480
156 aaatgggaga cagagaccac ctcttggaa taccagttcg caaatgatcc tgcacggttc 540
157 cggttcacgc accagacgtc gttcgtgaag cgccacctgg gcctctccag caccctggc 600
158 atcagatggg tgggtggcctt cttcaggcag ttcttcagggt cagtcacca ggtggactac 660
159 ctgaccttga gggcaggctt catcaacgcg catttgctgc aaaacagcaa gttcgacttc 720
160 cacaagtaca tcaagaggtc gatggaggac gacttcaagg tcgtcgtcgg catcagcctc 780
161 ccgctgtggg gtgtggcgat cctcaccctc ttcttgaca tcaatggggg tggcacgctc 840
162 atctggattt ctttcatccc tctcgtgac ctcttggtg ttggaaccaa gctggagatg 900
163 atcatcatgg agatggcctt ggagatccag gaccgggcga gcgtcatcaa gggggcccc 960
164 gtggctcgagc ccagcaacaa gttcttcttg ttccaccgcc ccgactgggt cctcttcttc 1020
165 atacacctga cgttgttcca gaacgcgttt cagatggcgc attttggtg gacagtggcc 1080
166 acgcccggct tgaagaaatg ctaccacag cagatcgggc tgagcatcat gaaggtgggtg 1140
167 gtggggctag ctctccagtt cctctgcagc tatatgacct tccccctcta cgcgtcgtc 1200
168 acacagatgg gatcaaacat gaagaggtec atcttcgac agcagacgtc caaggcgctc 1260
169 accaactggc ggaacacggc caaggagaag aagaaagtcc gagacacgga catgctgatg 1320
170 gctcagatga tcggcgacgc aacaccgagc cgaggctcgt cgccgatgcc gagccggggc 1380
171 tcataccccc tgcacctgct tcacaagggc atggggcggt cggacgaccc ccagagcgcg 1440
172 cccacctgc caaggaccca gcaggaggt agggacatgt acccggttgt ggtggcgcac 1500
173 ccggtgcaca gactaaatcc taacgacagg agggaggtcc cctcgtcgtc ggccctcgaa 1560
174 gccgacatcc ccagtgcaga ttttctcttc agccagggat ga 1602

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177 &lt;210&gt; SEQ ID NO: 3

178 &lt;211&gt; LENGTH: 2098

179 &lt;212&gt; TYPE: DNA

180 &lt;213&gt; ORGANISM: Hordeum vulgare

182 &lt;400&gt; SEQUENCE: 3

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183 gcggagctca tgctggtggg cttcatatcc ctgctcctca tcgtcacgca ggaccccatc 60
184 atcgccaaga tatgcatctc cgaggatgcc gccgacgtca tgtggccctg caagcgcggc 120
185 accgagggcc gcaagcccag caagtacgtt gactactgcc cggagggtgag cagcagagcc 180
186 cggaccagca gcttcacgat gatgaagaaa tcaataccga acttttctt gttttcttct 240
187 gattgtcgtc ttggcttggc ttaattggtg tgtgtgtgtg tgtttgcagg gcaaggtggc 300
188 gctcatgtcc acgggcagct tgcaccagct gcacgtcttc atcttcgtgc tcgcggtctt 360
189 ccatgtcacc tacagcgtca tcaccatagc tctaagccgt ctcaaagtga gcctttgctt 420
190 cttcttcttc ttcttttacc gcacgtctgt ctgtcaggcg tactacctg ttcacaggc 480
191 ttgagtaaaa ctgttccata atctgctccg gcataatcct ctctcctgc agatgagaac 540
192 atggaagaaa tgggagacag agaccacctc cttggaatac cagttcgcaa atggtcagga 600
193 tccccactc tgcaatctcc cttcttctga aaccaaacct gatgatccat ttaaagacgc 660
194 aggcacgatc agagtgagt aactgatgta tgttcatttt ttgtgtcctt tcagatcctg 720
195 cacggttccg gttcacgcac cagacgtcgt tcgtgaagcg ccacctgggc ctctccagca 780

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/722,377

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Input Set : A:\620\_58.app

Output Set: N:\CRF3\05092002\I722377.raw

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196 cccctggcat cagatgggtg gtgagttttt tagcttctta tctgcccctc atctgtgtgt 840
197 aatgttttggc gtatggagtc aggtgattta ccttgccctgt gatgtttgtt gccttgtcag 900
198 gtggccttct tcaggcagtt cttcagggtca gtcaccaagg tggactacct gaccttgagg 960
199 gcaggcttca tcaacgtacg tgccctcccct tctagctccg ccattgctgc cgcgatgtag 1020
200 cagcaaagct tctcaagtta tcctttctgac gctaaagtte ccattgtttt tccctcaaatt 1080
201 attctgcgca ggcgcatttg tcgcaaaaca gcaagttcga cttccacaag tacatcaaga 1140
202 ggtcgtatgga ggacgacttc aaggtcgtcg tcggcatcag gtacgttcca ttccttcctc 1200
203 tgcaccacac cacaccccat ggatagattt taacaattgc tgtcagggtc cacatgataa 1260
204 caatatacta tgaacttggt ctttgctcct tgtccttgca cgatcatgac acatttggcc 1320
205 tgtttttcgca gcctcccgtc gtgggggtgtg gcgctcctca cctcttctct tgacatcaat 1380
206 ggtatggacc ttctcctctc cggtttctct attgctttgc agctaaataa aacacttgca 1440
207 attcgtctcg tgatcacgcg tcatttttca accatttctt tttctactca taggggttgg 1500
208 cacgctcatc tggatttctt tcattcctct cgtggttaagt gcagatttct ccacgaaag 1560
209 caacagcaaa cccaatttga tcgcaatgga aaccacacac taatattaac tcaaaatgtc 1620
210 aattgtcggg gcgtcttctc caacagatcc tcttgtgtgt tggaaaccaag ctggagatga 1680
211 tcatcatgga gatggccctg gagatccagg accgggagcg cgtcatcaag ggggcccccg 1740
212 tggctcgagcc cagcaacaag ttctttctggt tccaccgccc cgactgggtc ctcttcttca 1800
213 tacacctgac gttgttccag aacgcgtttc agatggcgca ttttgtgtgg acagtgggtac 1860
214 gccaccgatg aacttgctcag ttaacatggg tgtcaaggca ccgagtgcg ctgatgaact 1920
215 gctctgacgg agatttactt gtgttgtagg ccacgcccgg cttgaagaaa tgctaccaca 1980
216 cgcagatcgg gctgagcatc atgaagggtg tgggtggggt agctctccag ttcctctgca 2040
217 gctatatgac cttccccctc tacgcgctcg tcacacaggt aataaaaccg tccaggaa 2098

```

220 &lt;210&gt; SEQ ID NO: 4

221 &lt;211&gt; LENGTH: 2177

222 &lt;212&gt; TYPE: DNA

223 &lt;213&gt; ORGANISM: Oryza sativa

225 &lt;220&gt; FEATURE:

226 &lt;221&gt; NAME/KEY: misc\_feature

227 &lt;222&gt; LOCATION: (4, 27, 66, 119, 136, 152, 155, 192)

228 &lt;223&gt; OTHER INFORMATION: n is a or g or c or t

230 &lt;220&gt; FEATURE:

231 &lt;221&gt; NAME/KEY: misc\_feature

232 &lt;222&gt; LOCATION: (213, 241, 243, 246, 250, 456)

233 &lt;223&gt; OTHER INFORMATION: n is a or g or c or t

235 &lt;400&gt; SEQUENCE: 4

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W--> 236 gcanagctga tgctgctggg cttcatntcc ctgcttctca ccgtggcaca ggcgcccac 60
W--> 237 tccaanatct gcatcccca aatccttctgt tggcgtgcaa ggcaggccna 120
W--> 238 gatgccatcg aagaanaagc agcaagtggg cncngtctt tggccggcgc cggcggcggg 180
W--> 239 gactactgct cnaaatctga tgtgagaata acnccagctg ccggcaagca caacctcgat 240
W--> 240 ncnatnactn atttaactat aattgatttt tcttgggttt tctgcagggc aaggtggcgc 300
241 tgatgtcggc aaagagcatg caccagctgc acattttcat cttcgtgctc gccgtgttcc 360
242 atgttaccta ctgcatcatc accatgggtt tagggcgctt caaagtgagt ttgtcgttct 420
W--> 243 gtccctcatg cacatgtttt ctctagtctt agcaanattg tcagtccttc aaatggattg 480
244 tttcgacaag aaaccaattt tattaatttg ccagttaa atataataat tgatctttct 540
245 tgggttttaga tgaagaaatg gaagaagtgg gagtcacaga ccaactcatt ggagtatcag 600
246 ttcgcaatcg gtagtgaatt aagaatctcc ctaactatct catttcagaa cctttatgat 660
247 aatgtcttga aagaggagga gcaaatcagc tgaaaaatat gatcgatcca tgcagatcct 720
248 tcacgattca ggttcacgca tcagacgtcg ttcgtgaagc ggcattctgg atcattctca 780
249 agcaccctcg ggctcagatg gatcgtgagt tatcaatctc cgaatacatg cttgtttttt 840

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## RAW SEQUENCE LISTING

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Input Set : A:\620\_58.app

Output Set: N:\CRF3\05092002\I722377.raw

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250 attcttgcaa ctggcctagc tgttccaatt caatccatat tttttgaaaa aaaaaatatt 900
251 catgccgtgt ttgttgtag gtagcattct tcaggcagtt ctttgggtcc gtcaccaagg 960
252 tggactacct gaccatgcgg caaggcttca tcaatgtata tactaatcaa acctgaccaa 1020
253 ttcaacattg atgatgcaaa cagaagacca ggtttttttt ttccgagttg tgcattgaag 1080
254 ttaatggttt tagcttcttc tcttttgtag gcgccatttg tcgcagaata gcaagttcga 1140
255 cttccacaaa tacatcaaga ggtcttttga ggacgacttc aaagtgtgctg ttggcatcag 1200
256 gtccgtcctc gctttattaa ttataggact cttatatcca acattttttt tataaagaaa 1260
257 catatttagt ctccagttgt gtatgtgtat gtggatcttg acacatttgg ctggttttgc 1320
258 agcctccctc tgtggttctg cggaatcctt gtactcttcc tcgatatcca cggtaatcct 1380
259 tgtcctatct cattcttttt tttactctca aaacctgtgt ctgaattggt cttataatca 1440
260 ccategattt tttttcaact ttttccccgc gtgtaggtct tggcacactt atttggatct 1500
261 cttttgttcc tctcatcgta agagcgaaat ttccccgtc caaagaaaca gttaacataa 1560
262 ttaattatgc tttaatttat catgaaaatt aatatgatca tataactaat gaacaaacat 1620
263 tcatgtgaat gccaccgttg tctcagatcg tcttgtagt tgggaccaag ctagagatgg 1680
264 tgatcatgga gatggcccaa gagatacagg acagggccac tgtgatccag ggagcaccta 1740
265 tgggtgaacc aagcaacaag tacttctggt tcaaccgccc tgactgggtc ttgttcttca 1800
266 tacacctgac actcttccca tgtacatgtt taaaaccgac ggacggatcg atcgatcacc 1860
267 agaacgcatt ttcagatggc gcattcgtat ggactatggt gtgtatgcta cttgcttagt 1920
268 tgttgccatt atcagttctt aagcaaatta agtgtgatgc atgcactgac taatgagaca 1980
269 aaaaatgaca cagcttggtc atcgatctgg ttgttttgtg tgtgacagge aacacctggt 2040
270 ctgaagaaat gcttccatga aaatatattg ctgagcatcg tggaggtcat tgtggggatc 2100
271 tctcttcagg tgctatgcag ctagatcacc ttcccgtctc acgcgctcgt cacacaggtg 2160
272 aacaagcaat tcacaaa 2177
275 <210> SEQ ID NO: 5
276 <211> LENGTH: 2431
277 <212> TYPE: DNA
278 <213> ORGANISM: Hordeum vulgare
280 <400> SEQUENCE: 5
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282 gccaagatat gcatctccga ggatgccgcc gacgtcatgt ggccctgcaa gcgcggcacc 120
283 gagggccgca agcccagcaa gtacgttgac tactgcccgg aggtgagcag cagagcccgg 180
284 accagcagct tcacgatgat gaagaaatca ataccgaact ttttcttggt ttcttctgat 240
285 tgtcgtcttg gcttggttta attggtgtgt gtgtgtgtgt ttgcagggca aggtggcgct 300
286 catgtccacg ggcagcttgc accagctgca cgtcttcatc ttctgtctcg cggcttcca 360
287 tgtcacctac agcgtcatca ccatagctct aagccgtctc aaagttagcc tttgcttctt 420
288 cttcttcttc ttttaccgca cgtctgtctg tcaggcgtag ctacctgttc atcaggcttg 480
289 agtaaaactg ttccataatc tgctccggca taatcctctc ctccctgcga tgagaacatg 540
290 gaagaaatgg gagacagaga ccacctcctt ggaataccag ttcgcaaatg gtcaggatcc 600
291 ccactctgca aatctcccct tcttcgaaac caaacctgat gatccattta aagacgcagg 660
292 cacgatcaga gtgagtgaac tgatgtatgt tcattttttg tgtcctttca gatcctgcac 720
293 ggttccggtt cacgcaccag acgtcgttct tgaagcgcca cctgggcctc tccagcacc 780
294 ctggcatcag atgggtggtg agtttttttag cttcttatct ggccgtgat gtttgttgcc 840
295 ttgtcaggtg gccttcttca ggcagttctt caggctcagtc accaaggtgg actacctgac 900
296 cttgagggca ggcttcatca acgtacgtgc ctcccttct agctccgcca ttgctgccgc 960
297 gatgtagcag ccaaattatt ctgcgcaggc gcatttgctg caaaacagca agttcgactt 1020
298 ccacaagtac atcaagaggt cgatggagga cgacttcaag gtcgtcgtcg gcatcaggta 1080
299 cgttccattc ctccctctgc accacaccac accccatgga tagattttta caattgctgt 1140
300 caggttccac atgataacaa tatactatga acttggtctt tgcctcttgt ccttgcacga 1200
301 tcatgacaca tttggcctgt ttccgcagcc tcccgtgtg ggggtgtggcg atcctcacc 1260

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**RAW SEQUENCE LISTING ERROR SUMMARY**  
**PATENT APPLICATION: US/09/722,377**

DATE: 05/09/2002  
 TIME: 14:19:21

Input Set : A:\620\_58.app  
 Output Set: N:\CRF3\05092002\I722377.raw

**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:4; N Pos. 4,27,66,119,136,152,155,192,213,241,243,246,250,456  
 Seq#:6; N Pos. 7,90,93,115,177,183,217,249,254,272,356,357,364,1017,1037  
 Seq#:6; N Pos. 1041,1458,1616,1641,1861,1879,1923,2050  
 Seq#:21; Xaa Pos. 23,29,48,84,85  
 Seq#:23; Xaa Pos. 23  
 Seq#:27; Xaa Pos. 14  
 Seq#:29; Xaa Pos. 93  
 Seq#:31; Xaa Pos. 29  
 Seq#:33; Xaa Pos. 6,33,51,64,79  
 Seq#:35; Xaa Pos. 10,17,19,47  
 Seq#:37; Xaa Pos. 6  
 Seq#:41; Xaa Pos. 29  
 Seq#:43; Xaa Pos. 14,15  
 Seq#:45; Xaa Pos. 12,27,51  
 Seq#:47; Xaa Pos. 3  
 Seq#:49; Xaa Pos. 2  
 Seq#:50; N Pos. 68,88,143,181,251,254,328,333,337,341,348,349,356,357,368  
 Seq#:50; N Pos. 370,372,373,381  
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 Seq#:54; N Pos. 443,469,473,474  
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 Seq#:55; N Pos. 62,65,68,71,73,75,80,81,89,90,91,100,107,108,113,114,115  
 Seq#:55; N Pos. 134,153,167,176,235,280,354,362  
 Seq#:56; N Pos. 164

## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/722,377

DATE: 05/09/2002

TIME: 14:19:21

Input Set : A:\620\_58.app

Output Set: N:\CRF3\05092002\I722377.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application Number  
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:236 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0  
L:237 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:60  
L:238 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:120  
L:239 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:180  
L:240 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:240  
L:243 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:420  
L:346 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0  
L:347 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:60  
L:348 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:120  
L:349 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:180  
L:350 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:240  
L:351 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:300  
L:352 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:360  
L:362 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:960  
L:363 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:1020  
L:370 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:1440  
L:372 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:1560  
L:373 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:1620  
L:377 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:1860  
L:378 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:1920  
L:380 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:2040  
L:1556 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:16  
L:1559 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:32  
L:1568 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:80  
L:1616 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:16  
L:1692 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0  
L:1756 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:80  
L:1795 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:16  
L:1841 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:0  
L:1847 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:32  
L:1850 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:48  
L:1853 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:64  
L:1892 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:0  
L:1895 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:16  
L:1898 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:32  
L:1931 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:0  
L:2010 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:16  
L:2043 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:0  
L:2082 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:0  
L:2085 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:16  
L:2091 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:48  
L:2118 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:0  
L:2154 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49 after pos.:0  
L:2186 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:60  
L:2187 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:120  
L:2188 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:180

## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/722,377

DATE: 05/09/2002

TIME: 14:19:21

Input Set : A:\620\_58.app

Output Set: N:\CRF3\05092002\I722377.raw

L:2189 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:240  
L:2190 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:300  
L:2191 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:360  
L:2212 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:60